# MANUFACTURING EXTENSION PARTNERSHIP Success Stories from the Field

## **American Laser Products, Inc.**

Wisconsin Manufacturing Extension Partnership

American Laser Products Generates Success with WMEP

#### **Client Profile:**

American Laser Products began in President Bill Henry Sr.'s basement in 1992. Today, American Laser Products in Middleton, Wisconsin, is a bustling, growing company that remanufactures and reconditions laser printer cartridges. The 20-person operation moves orders out the door at a quick, steady pace; however, it was not always like that.

#### Situation:

American Laser President Bill Henry worried about how his small company could handle large orders. "Everyone would scramble to get our orders out," admits Henry. He realized that something big had to be done immediately to improve operations and efficiency. That's when Henry asked the Wisconsin Manufacturing Extension Partnership (WMEP), a NIST MEP network affiliate, for help.

### Solution:

WMEP Manufacturing Specialist Rick Ray suggested that the company had opportunities for gains throughout the organization. Henry decided to undertake a more comprehensive Lean Transformation rather than separate projects for American Laser to tackle their major operational issues in an overall way. Ray also helped tailor the project to American Laser's specific needs. The company even received a BEST grant from the Wisconsin Department of Commerce to apply to part of the project. One key to achieving a Lean Transformation is building a Lean Culture, in order to ensure that improvements will be sustained. The most critical element of Lean Culture is Team Building. The first step was to set up a Core Team to drive change and take responsibility for meeting Lean goals. The core team has and continues to set the priorities and the agenda for improvement. Henry found that a personality profile provided by WMEP using the DISC method really helped the team come together. The DISC method classifies people into different personality types based on how they approach tasks or handle certain situations. Henry states, "Once we had a handle on each others' personalities and our own, we communicated better." On his own, Henry informally applied DISC to better communicate with customers. "It improved my understanding of my customers and how to relate to them in the best way", says Henry.

Second, WMEP educated the employees on Lean manufacturing principles. Henry was concerned that resistance to change and language and cultural barriers would make improvements more difficult. In addition to the standard overview in English, WMEP Alliance Partner, Bilingual Services provided Spanish Lean training. Workers, both English and Spanish-speaking, returned to the factory with great enthusiasm for Lean. Both groups started working together as a team to support the improvement effort.

Third, the company created a Value Stream Map (VSM) with the assistance of WMEP for its highest volume product line. The project revealed bottlenecks in their processes and pointed the way to needed improvements. For example, there were too many parts in inventory from ordering excess



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quantities. With the help of WMEP, they established a Kanban system for materials using cards. Now, they only order what they need when they need it. In addition, some workstations were not in the optimal locations. American Laser moved workstations to improve the physical flow of the product. The company also implemented cellular flow (one-piece flow) with specific cells focused on specific product lines. Now, product flows at a quicker pace and orders are filled ahead of schedule. In addition, they conducted a 5S project to organize and standardize the workplace. Today, workers can find what they need more quickly in a cleaner, safer work environment.

With the help of Lean, American Laser's biggest distributor was recognized with a supplier award from a major government client. Lean transformation offers exponential benefits and is a great way for those new to Lean to harness its power. It is a fantastic investment, even for small companies as demonstrated with American Laser. Ray explains, "Lean Transformation exploits Lean tools more effectively because you use multiple tools in concert, rather than one at a time, and develop a real improvement plan that fits your company." American Laser will continue to use Value Stream Mapping on other lines. They have just completed a VSM on their color cartridge line and are about to start another on their Xerox line. Henry understands the significance of VSM as tool. "It really has showed us where we need to change," says Henry. VSM helps them start and stay on the road of continuous improvement.

#### Results:

- \* Increased on-time delivery by 96 percent.
- \* Decreased lead time by 50 percent.
- \* Decreased inventory by 75 percent.
- \* Increased productivity by 25 percent.
- \* Increased cash flow.
- \* Improved quality of product by 50 percent.
- \* Achieved a more competitive and profitable position.

### **Testimonial:**

"WMEP really gives me more bang for my buck. It was money well spent." Bill Henry , President

